

WHAT IS CLAIMED IS:

1 1. A system for controlling a home robot, comprising:
2 a home server responsive to a user's command for controlling said home robot, said home
3 server and said home robot being in a same premises; and
4 said home robot being controlled to perform only in response to command result signals
5 generated by said home server, said command result signals being generated in response to said
6 user's command.

1 2. The system as set forth in claim 1, said user's command being transmitted as a wireless
2 local area network (WLAN) signal to said home server via said home robot for analysis by said
3 home server.

1 3. The system as set forth in claim 1, said home server comprising:
2 an internal communication unit generating and receiving wireless local area network
3 (WLAN) signals for communicating with said home robot;
4 a control unit for analyzing the user's commands, where said wireless local area network
5 (WLAN) signals comprises said user's command;
6 a voice recognition unit for performing a voice recognition function on voice signals
7 constituting said user's commands and providing command information to said control unit, based
8 on recognition of said voice signals, to said control unit for analyzing the user's commands in

9 response to the command information;

10 a voice synthesizing unit for producing a digital voice signal when said control unit
11 determines that said command information requires a voice response; and

12 a home robot driving managing unit for producing motion control signals to be transmitted
13 to said home robot to control movements of said home robot, said digital voice signal and said
14 motion control signals being transmitted to said home robot via said control unit and said internal
15 communication unit as said command result signals.

1 4. The system as set forth in claim 1, said home robot comprising:

2 a microphone for receiving the user's command as an external voice command signal from
3 the user and converting the voice command signal into an electric command signal;

4 an analog-to-digital converter for converting the electric command signal to a digital
5 command signal;

6 a wireless communication unit for converting the digital command signal into a wireless
7 command signal and transmitting the wireless command signal to said home server, and for
8 receiving a wireless command result signal from the home server, said wireless communication
9 unit converting the wireless command result signal into a digital command result signal;

10 a digital-to-analog converter for converting a digital voice signal to an analog voice signal
11 when said digital voice signal is included with said digital command result signal;

12 a speaker for producing an audio voice signal in response to the analog voice signal from
13 said digital-to-analog converter;

14 a control unit receiving said digital command result signal from the wireless command unit
15 and analyzing said digital command result signal to control one or more actions of said home
16 robot, and based on said analysis, said control unit outputting one or more of said digital voice
17 signal, motion control signals and an image signal;

18 a driving unit for moving body components of said home robot in response to one or more
19 of said motion control signals from the control unit, each motion control signal being determined
20 by the analysis performed by said control unit on said digital command result signal; and

21 a display unit for displaying an image in response to said image signal.

1 5. The system as set forth in claim 4, said display unit reproducing operation status display
2 information of the home robot.

1 6. The system as set forth in claim 1, further comprising a network for communicating with
2 one or more service servers, said service servers having software modules for downloading to said
3 home server, each service server being utilized to generate a corresponding command for
4 controlling said home robot.

1 7. A method for operating a home robot using a home server, the method comprising the
2 steps of:

3 receiving a voice service request analog-to-digital at the home robot, for converting the
4 voice, and transmitting the voice to the home server through wireless communication;

5 receiving the voice at the home server from the home robot, for interpreting a requested
6 service by voice recognition, performing operations for the requested service, generating a
7 response message to the requested service, synthesizing the response message into voice, and
8 transmitting the voice response message to the home robot; and

9 receiving the voice response message at the home robot from the home server, for
10 reproducing the voice response message as voice through a speaker.